



U.S. Army Research, Development and Engineering Command



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MATREX Simulation Initialization

DoD M&S Conference

10 March 2008

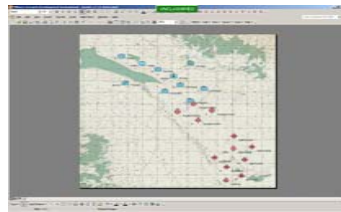
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- In the past, most organizations supported dedicated simulation programs.
- Considerable pre-exercise effort was required to enable the collaboration of multiple simulations.
- 12-18 months of pre-exercise effort was not uncommon for some DoD Joint training events involving multiple, dissimilar simulations.
- Accordingly, DoD has identified “rapid scenario generation” as a top M&S priority.

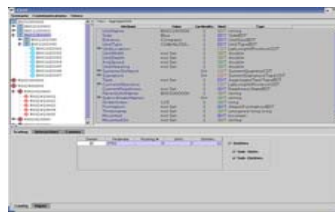
## FEDERATION ENVIRONMENT DESIGN:

- ✓ Scenario Description.
- ✓ Unit/Entity Distribution Plan.
- ✓ Network Design.
- ✓ Command Scripts.

MSDE



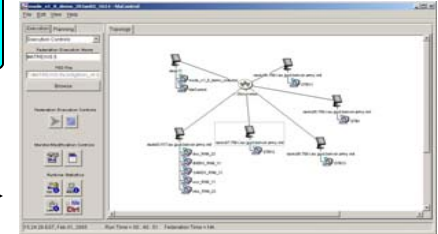
CSAT



FSE DB



hlaControl



remote creates

HLA RTI

remote creates

AMS

remote creates

C3GRID

OneSAF

IWARS

remote creates

OTB

HC-NEBC

CES

ARMS

NV Tool Set

MSLS

NEC2

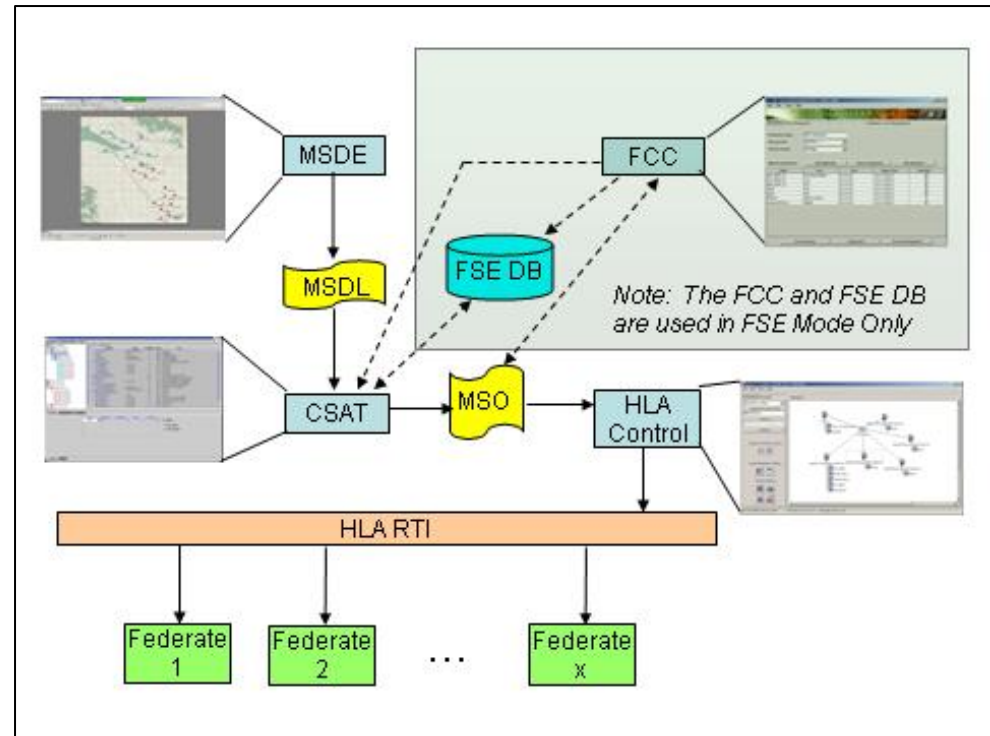
hlaResults



- AMS – Air Mobility Server
- ARMS – Armaments Server
- CES – Communications Effects Server
- C3GRID – Command, Control & Communications Grid
- HC-NEBC – Human Centric Network Enabled Battle Command
- IWARS – Infantry Warrior Simulation
- MSLS – Missile Server
- NEC2 – Network Effects Command & Control
- NV Tool Set – Night Vision Tool Set
- OneSAF – Semi-Automated Forces
- OTB – OneSAF Test Bed

- Quickly and efficiently generates both tactical scenario and HLA Federation instantiation reader files in standardized formats
- Initializes HLA Federations from a common point
- Minimizes both manual input and configuration conflict errors
- Simplifies configuration management and increases data consistency
- All simulation environments that employ the MATREX standard for scenario and federation reader files have access to all other MATREX initialization compliant scenarios

- Reduces time and resources required to initialize a distributed simulation.
- Promotes the reuse of standardized scenario data formats.
- Improves configuration management via an easily manageable number of data sets.
- Allows incorporation of additional components and scenarios that are compliant with the MSDL format.



- Align the MATREX Simulation Initialization process with the following external activities as required:
  - OneSAF Initialization Process
  - LSI FSE Initialization Process
  - 3CE LVC SimInit TFA IPT Process
  - Army Initialization IPT Process
  - JFCOM Joint Rapid Scenario Generation (JRSG) IPT
  - DoD M&S Steering Committee Directed Joint Data Alternatives (JDA) Study



# Customers



- RDECOM:
  - CERDEC C4ISR OTM Federation
  - AMRDEC JAMUS Federation
- TRADOC:
  - Multiple BLCSE Federations
- FCS Program:
  - FSE Federation



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